

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: CARPER et al. )  
Application No.: ) Group Art Unit: n/a  
Filed: January 15, 2004 ) Examiner: n/a

For: HYBRID CERAMIC MATRIX COMPOSITE TURBINE BLADES FOR  
IMPROVED PROCESSIBILITY AND PERFORMANCE

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

SIR:

The following are included with this Information Disclosure Statement:

- [X] A. PTO/SB/08**
- [ ] B. CERTIFICATION**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- [ ] C. \$180.00 FEE PAYMENT**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- [ ] D. \$180.00 PETITION, CERTIFICATION & PETITION FEE  
PAYMENT**  
(37 C.F.R. 1.97(d)-before issue fee payment)

The following are submitted in the above-identified application in compliance with  
37 CFR 1.98:

- [ ] I.** A copy of each listed U.S. Patent and U.S. Patent application publication  
[1.98(a)(2)(i)].
- [X] II.** A copy of each listed foreign patent and/or published foreign patent  
application. For each listed foreign patent and/or published foreign patent  
application [1.98(a)(2)]:
  - [X] a)** the English language version or an English translation if not  
published in English, if available (see PTO-1449)[1.98(a)(3)];  
and/or

- ☐ (b) U.S. counterpart patents or English language equivalents of the foreign patents or published foreign patent applications (see PTO-1449); and/or
- ☐ (c) a concise explanation of the relevance of the listed patents, publications or other information (see PTO-1449, foreign search report or other, attached), as it is presently understood by the person signing this disclosure, since no English translation is currently available[1.98(a)(3)].
- ☐ III. A copy of each listed publication, other than published foreign applications. For each listed publication [1.98(a)(2)]:
  - ☐ (a) an English translation, if available, when the original publication is not in the English language (see PTO-1449)[1.98(a)(3)];
  - ☐ (b) a concise explanation of the listed publications (see PTO-1449), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- ☐ IV. For any other listed information, a copy of the information or that portion which caused it to be listed (see PTO-1449)[1.98(a)(2)(iii)].
- ☐ V. Each listed U.S. Patent, Publication or other information that was previously cited by or submitted to the Office in a prior application, which application is relied upon for an earlier filing date under 35 U.S.C. § 120 [1.98(d)].
- ☒ VI. Copies of each listed U.S. Patent and U.S. Patent application publication are not being submitted herewith pursuant to a waiver of 37 CFR 1.98(a)(2)(i) by the USPTO on July 11, 2003 for applications filed after June 30, 2003.

This information is submitted in the above-identified application in compliance with 37 C.F.R. 1.97 because:

- ☒ 1. This information disclosure is submitted within three months of the filing date of the application, or before the mailing date of the first office action on the merits of the application [1.97(b)].
- ☐ 2. This information disclosure is submitted before the mailing date of a final action in this application under 1.113[1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).
- ☐ 3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).

☐ 4. This information disclosure is submitted after the mailing date of a final action under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).

☐ 5. This information disclosure is submitted after the mailing date of a notice of allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).

☐ 6. This information disclosure statement is submitted with the statement required for items 2, 3, 4 or 5 above [1.97(c), (d), (e)]:

☐ I, , hereby state the following:

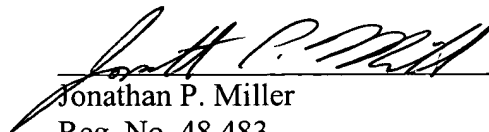
☐ **Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.**

☐ **No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement.**

☐ 7. This information disclosure statement is submitted with the fee of \$180 set forth in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item 6 statement is provided).

☐ 8. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059.

Respectfully submitted,

  
Jonathan P. Miller  
Reg. No. 48,483

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	
Filing Date	January 15, 2004
First Named Inventor	CARPER et al.
Group Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	121497 (07783-0172)

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	A	US-6,532,657 B1	03-18-2003	Weimer et al.	
	B	US- 6,441,341 B1	08-27-2002	Steibel et al.	
	C	US- 6,428,740 B2	08-06-2002	Dunyak et al.	
	D	US- 6,403,210 B1	06-11-2002	Stuivinga et al.	
	E	US- 6,316,048 B1	11-13-2001	Steibel et al.	
	F	US- 6,284,357 B1	09-04-2001	Lackey et al.	
	G	US- 6,280,550 B1	08-28-2001	Steibel et al.	
	H	US- 6,274,078 B1	08-14-2001	Dunyak et al.	
	I	US- 6,258,737 B1	07-10-2001	Steibel et al.	
	J	US- 6,221,475 B1	04-24-2001	Domergue et al.	
	K	US- 6,025,048	02-15-2000	Cutler et al.	
	L	US- 6,024,898	02-15-2000	Steibel et al.	
	M	US- 5,990,025	11-23-1999	Suyama et al.	
	N	US- 5,952,100	09-14-1999	Corman et al.	
	O	US- 5,944,485	08-31-1999	Maumus et al.	
	P	US- 5,902,756	05-11-1999	Aly et al.	
	Q	US- 5,804,306	09-08-1998	Sorenson et al.	
	R	US- 5,738,951	04-14-1998	Goujard et al.	
	S	US- 5,723,213	03-03-1998	Carpenter et al.	
	T	US- 5,490,892	02-13-1996	Castagnos et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	U	EP 0 385 869 A1	09-05-1990	Societe Europeenne De Propulsion		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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		Number - Kind Code <sup>2</sup> (if known)			
	V	US-5,455,106	10-03-1995	Steffier	
	W	US- 5,336,350	08-09-1994	Singh	
	X	US- 5,330,854	07-19-1994	Singh et al.	
	Y	US- 5,114,772	05-19-1992	Vives et al.	
	Z	US- 5,015,540	05-14-1991	Borom et al.	
	AA	US- 4,837,230	06-06-1989	Chen et al.	
	AB	US- 4,737,328	04-12-1988	Morelock	
	AC	US- 4,485,179	11-27-1984	Brennan et al.	
	AD	US- 4,324,843	04-13-1982	Brennan et al.	
	AE	US- 4,040,770	08-09-1977	Carlson	
	AF	US- 3,752,600	08-14-1973	Walsh et al.	
	AG	US- 2002/0197465 A1	12-26-2002	Butner et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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